



Medical Imagery

Acute Gastric Volvulus: A Deadly Surgical Condition at Emergency Department

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1. Introduction

Gastric volvulus is defined as the rotation of the hollow viscus around its mesentery.

The classic symptoms, known as “Borchardt’s triad” consist of nonproductive vomiting, severe and constant epigastric pain, and difficulty inserting a nasogastric tube; however, these may not be present in as many as 25% of the patients. The mortality rate of 30–50% is reported.^{1,3} It should be differentiated from myocardial infarction, perforated peptic ulcer, and abdominal apoplexy.

2. Case

An 85-year-old man has a medical history of hypertension and cerebral transient ischemic attack presented to our emergency department with abdominal pain for 4 days without vomiting and nausea. Physical examination revealed periumbilical tenderness. Plain film revealed severely distended stomach with the upward displacement of left hemidiaphragm, and computed tomography showed the rotation of stomach around its short axis with marked narrowing at the gastric antrum region (Figure 1). An emergent laparoscopic exam revealed severely distended twisted stomach. Mesenteroaxial type gastric volvulus was impressed. Surgical reduction of the twisted stomach and gastropexy were performed. Post-operative recovery was uneventful, the patient was smoothly discharged seven days later.

The diagnosis of gastric volvulus is conventionally achieved by computed tomography, if the nasogastric tube decompression of the volvulus is unable to be completed, or if there are clinical concerns about irretrievable gastric ischaemia, the immediate surgical exploration should be undertaken.² In conclusion, the classic “Borchardt’s triad” should raise a high suspicion of acute gastric volvulus

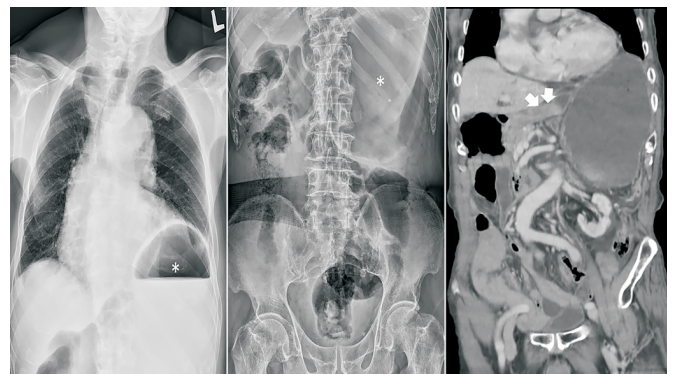


Figure 1. Left and middle panel: Chest and abdomen radiograph showing severely distended stomach with the upward displacement of left hemidiaphragm (asterisk). Right panel: CT with contrast coronal view demonstrates the characteristic of mesenteroaxial type gastric volvulus, the rotation of stomach around its short axis, gastric outlet obstruction with marked narrowing or ‘bird-beaking’ at the gastric antrum region (arrow).

to perform further image investigations. Urgent surgery and intensive care management are advised to avoid gastric necrosis and perforation.

Conflict of interest

None.

References

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